



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,968	10/29/2003	Ken Salter	GTL-15-GF	7996
22827 7590 11/13/2008				
DORITY & MANNING, P.A.				
POST OFFICE BOX 1449				
GREENVILLE, SC 29602-1449				
EXAMINER				
MARCELO, MELVIN C				
ART UNIT		PAPER NUMBER		
2416				
MAIL DATE		DELIVERY MODE		
11/13/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/695,968

**Applicant(s)**

SALTER ET AL.

**Examiner**

Melvin Marcelo

**Art Unit**

2416

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 18-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments, see Remarks, filed 6-24-2008, with respect to 112, 1<sup>st</sup> paragraph rejections have been fully considered and are persuasive. The rejection of claims 1-17 under 112, 1<sup>st</sup> has been withdrawn.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 12, "preferentially" is vague since it is not clear what determines the "preference."

Claim 7, line 3, "the most efficient" is ambiguous since there is no guidelines in order to determine what constitutes the most efficient from the less efficient.

Claim 12, line 6, "the time marker" lacks a proper antecedent basis since the previous recitations of the marker does not state that it is a "time marker."

Claim 13, line 18, "the time marker" is ambiguous since there are two attached time readings--in line 10, an attached time reading to each data byte and in line 12, an attached time reading for each predetermined period.

**Claim Objections**

4. Claim 2 is objected to because of the following informalities: Claim 2 recites label "b)" but has canceled label "a)". Appropriate correction is required.

**Claim Rejections - 35 USC § 102**

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-10, 14 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Arimilli (US 6,570,891 B1).

With respect to the claims below, references to the prior art appear in parenthesis.

Claims

1. A method of handling a telephone call with an associated data package over a telephone system (Arimilli's voice/fax/data network in Figure 3) having a pair of first lines and a pair of second lines with limited bandwidth (Arimilli's four-wire leased line in column 6, lines 48-50, can be considered two pairs of lines with limited bandwidth) comprising:

generating at least one first data from at least one first data generator and at least one second data from at least one second data generator (First data from voice/fax channel and second data from asynchronous channels in Figure 3);

*prioritizing the at least one first data relative to the at least one second data so that the at least one first data is given priority* **(Advanced Priority Statistical Multiplexing in column 28, lines 8-35);**

*determining the bandwidth required for transmission of the at least one first data* **(Bandwidth determined for high priority data in column 28, lines 35-57);**

*preferentially sending the at least one first data within the bandwidth associated therewith on the first pair of lines* **(High priority data is transmitted in column 28, lines 35-57); and**

*using bandwidth as available to include the at least one second data* **(Excess bandwidth is used to transmit low priority data in column 28, lines 49-57).**

2. *The method of claim 1, wherein prioritizing comprises:*

*setting a protocol for electing the at least one first data over the at least one second data wherein the first data is of at least one first type and wherein the at least one second data is of at least one second type* **(Advanced Priority Statistical Multiplexing in column 28, line 1 is the protocol); and**

*b) automatically prioritizing the data based on the protocol* **(Time sensitive data is high priority and asynchronous data is low priority according to the protocol in column 28, lines 2-25).**

3. *The method of claim 1, wherein generating comprises :*

*a) selecting at least one reader to receive the data* **(Readers in Figure 4B corresponds to the voice/fax cards and channel cards which are selected by the Host/Aggregate card 400) ; and**

*b) reading data fed into the reader (Data from the cards is read/received in column 7, lines 39-50).*

4. *The method of claim 3, wherein the reader is selected from the group consisting of voice, picture, bio-marker, card holder information, DNIS and ANI call data readers, and combinations thereof (Readers include voice and picture/fax using the voice/fax card in Figure 4B).*

5. *The method of claim 4, further comprising :*

*creating at least one circuit board having a CPU with instructions (Aggregate board 400 in Figure 6B includes data processor/CPU 318) ; and*

*connecting the reader to the circuit board (Readers are connected at interfaces 605 and 607 in Figure 6B), wherein prioritizing comprises permitting the CPU to follow its instructions to prioritize the data (Data processor follows its control programs to collect voice/fax/data packets in column 9, line 55 to column 10, line 10, which are prioritized by the statistical multiplexer in column 28, lines 9-25).*

6. *The method of claim 3, wherein at least one reader is a telephone (Figure 3 illustrates a fax/telephone).*

7. *The method of claim 1 further comprising:*

*selecting the most efficient form for transmission of the data; and*

*converting the at least one first data and at least one second data to digitized forms corresponding to the most efficient data type for transmission (Analog voice information or*

**fax carrier is converted to digital form, wherein compression algorithms are used to create an efficient form of transmission in column 10, lines 31-44).**

8. *The method of claim 2, wherein prioritizing comprises:*

*determining the amount of data to store (Common memory for storing data in column 29, lines 48-58, inherently determines the amount of data to store in order to prevent buffer overflow);*

*storing data which is not ready to send (Data is stored in the memory could be in raw binary format in column 29, lines 54-56 which would not be ready to send); and*

*prioritizing data to be stored (Aggregate module 2005 in Figure 20A prioritizes the data in column 29, lines 11-23).*

9. *The method of claim 8, wherein prioritizing further comprises:*

*separating the data into bytes;*

*determining the size of bytes;*

*packaging the bytes to be sent;*

*attaching at least one common marker to each data made up of digital data bits; and*

*streaming data into bytes with the marker (Assembled voice/fax data frame in Figure 16 include size of bytes (i.e. byte count) and common markers (i.e. block ID, Dest. Node)).*

10. *The method of claim 9, further comprising associating the marker with two types of data generation (The markers in Figure 16 are associated with voice or fax types of data in column 26, lines 10-19).*

14. *The method of claim 1 wherein sending data includes multiplexing the data by moving the data in both directions on the first lines (Arimilli, data multiplexers 300a and 300b on both sites in Figure 3 and described on column 5, lines 2-18).*

17. *The method of claim 7, wherein converting further comprises combining two or more data into a single signal for sending (Hybrid frame combines both low priority and high priority data for sending in column 32, lines 16-22).*

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arimilli.

Arimilli does not explicitly teach using several frequencies on the same channel to transmit several different streams of data from different readers simultaneously. Arimilli teaches a statistical time division multiplexer. However, Arimilli explicitly teaches that frequency division multiplexing and statistical time division multiplexing are known substitutes for use as a data multiplexer (column 1, lines 38-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute frequency division multiplexing for the statistical time division multiplexing in Arimilli for the reason that Arimilli teaches that they are known substitutes for one another in a data multiplexer.



Claims

15. *The method of claim 6, further comprising using several frequencies on the same channel to transmit several different streams of data from different readers simultaneously*  
**(Frequency division multiplexing in column 1, lines 38-50, would have resulted in several streams from the voice/fax/data cards on the same channel simultaneously since FDM uses several frequencies for simultaneous transmission).**

16. *The method of claim 15, further comprising providing multiple streams of data which streams of data include sampling for data assigned to a particular location on the data stream*  
**(Voice data streams are sampled in column 12, lines 24-39).**

***Allowable Subject Matter***

9. Claims 11-13 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin Marcelo whose telephone number is 571-272-3125. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on 571-272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melvin Marcelo/  
Primary Examiner  
Art Unit 2416

November 10, 2008